

REMARKS

Applicant wishes to thank the Examiner for the courtesies extended in holding the telephone interview on September 27, 2006. The amendments and remarks herein are believed to be consistent with the principles of that discussion.

With this paper, claims 1-26 are presently pending, of which claims 1, 11, 14, and 25 are independent, and claims 25-26 are newly added.

The most recent Office Action mailed August 9, 2006 ("*Office Action*") rejected claims 1-24 under 35 U.S.C. § 112 ¶1. The *Office Action* further rejected claims 1-10 under 35 U.S.C. § 112 ¶2. In addition, the *Office Action* rejected claims 1-7 and 9-24 as being obvious under 35 U.S.C. § 103(a) in light of U.S. Patent No. 6,714,220 to Sigl, ("*Sigl*") in view of U.S. Patent No. 6,724,370 to Dutta et al. ("*Dutta*"). The *Office Action* also rejected claim 8 under 35 U.S.C. § 103(a) as being obvious in light of *Sigl* and *Dutta*, and further in view of U.S. Patent Application No. 20020085038 to Cobbley, et al. ("*Cobbley*").¹ Still further, the *Office Action* objected to claim 1 for informalities relating to a typographical error.

With this paper, Applicant has removed from claim 1 the language "wherein the input method manager database communicates uniquely with the software input method manager," which is not believed necessary at this time in view of the present claim amendments. Applicant has further amended claim 11 to recite "a database," rather than "an independent database," which, again is not believed necessary in view of the present claim amendments. Applicant cannot, however, find similar language in claim 14, nor a citation in the *Office Action* to any objected language in claim 14 that would invoke the § 112 rejection of record.² Applicant respectfully

¹ Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

² In the event the *Office Action* is objecting generally to the use of the term "independent," Applicant respectfully notes that this term is used throughout Applicant's specification and initially filed claims when referring to the relationship between

submits, therefore, that the § 112 rejection(s) of record are now moot. In addition, Applicant has amended claim 1 to read "state," rather than "date," as pointed out in the *Office Action*. Accordingly, Applicant further respectfully submits that the objection of record over claim 1 is now moot.

Applicant's invention, as recited in amended claim 1, includes a system configured to dynamically determine from a database and provide one or more input methods, such as one or more software-based keyboards or input panels to facilitate user input to a plurality of application programs, comprising a plurality of software input methods that are independent of each of the plurality of application programs, each software input method having an input panel configured to receive user input based on user interaction therewith and stored in a software input method database; a software input method manager independent of each of the plurality of application programs, the software input method manager configured to, prior to receiving any user selection in any of the plurality of application programs, predict and select an appropriate first input method from the plurality of input methods based on a state of a first application program and to predict and select an appropriate second input method from the plurality of input methods based on a state of a second application program, to enable user interaction with the input panel of each input method to provide input to each application program; and an application state determination mechanism coupled to the software input method manager and each of the plurality of applications, the application state determination mechanism operable to determine the state of the first and second application programs.

In addition, Applicant's invention, as recited in amended claim 11, includes a computer-implemented method for dynamically determining one or more software-based input panels prior

applications and the various input managers or corresponding modules. *See, e.g.*, Applicant's published application at ¶ 53; and initially-filed claims 1, 11, and 14.

to any user selections after opening a particular application program, comprising receiving application state data from a first application program and a second application program, the application program state data received at a software input method manager via an application state determination mechanism that is independent of the application programs and independent of the software input method manager, the software input method manager further being independent of each of the plurality of application programs; automatically determining, prior to any user selection in the first or second application program, an input panel from a database of input methods for the first application program and for the second application program from a plurality of software input methods, each software input method being independent of each of the plurality of application programs, wherein the determined input panel is configured for use by the user with the first application program or the second application program; and returning data to at least one application program corresponding to user interaction with at least one input panel, the at least one input panel having at least one customized, displayed key that, when actuated, returns the text displayed on the key to at least one application program.

Furthermore, Applicant's invention, as recited in amended claim 14, includes a computer-implemented method for dynamically determining one or more software-based input panels prior to any user selections after opening a particular application program, comprising: prior to any user selection after opening any of a plurality of application programs, receiving application program state data from a first application program and a second application program of the plurality of application programs, each application program state received at a software input method manager via an application state determination mechanism that is independent of the application programs and independent of the software input method manager, the application state determination mechanism and the software input method manager independent of the

application program corresponding to the application program state data; selecting one or more input panels from a database of input panels based on the application program state data of the first and second application programs, and prior to any user selections with regard to the first or second application programs, the input panel independent of each of the plurality of application programs, displaying keys on the input panel to enable user interaction with the input panel; and returning key data to the application program corresponding to user interaction with the input panel.

Still further, Applicant's invention as recited in new claim 25 includes, in a computerized environment comprising a mobile computing device and one or more computerized instructions stored therein that cause the display of an application program and a touch-based input panel at the mobile computing device, a method of, independent of any user selections after opening the application program, automatically determining and displaying one or more customized, touch-based keyboards that are appropriate for a given application program, comprising receiving one or more requests to open an application program; prior to receiving any further user selections, receiving state data from the application program; comparing at least a portion of the received state data with an input method selection database information stored in the mobile computing device, the input method selection database comprising information regarding commonly-entered user text for the application program, one or more customized keys unique to the application program, and one or more customized key arrangements for the application program; and displaying through the mobile computing device a customized keyboard that is unique to the application program, wherein the customized keyboard includes one or more customized keys comprising text that, when selected by the user, is displayed on the mobile computing device.

In contrast with the foregoing, the *Sigl* reference teaches providing a "virtual keyboard" only in *response* to an input selection from a user for a particular "parameter." *E.g.*, col. 4, ll. 28-33; col. 5, ll. 30-31; col. 5, ll. 61-65. That is, the device only provides a customized keyboard *depending on* what parameter is selected by the user, since the device is configured to provide a keyboard that includes only those keys necessary to satisfy a particular, selected parameter. For example, if the user selects a parameter that only involves numbers, the device may be configured to display only an alphanumeric keypad. *E.g.*, col. 4, ll. 30-42. This selective displaying of certain keyboard keys in response to a user-selected parameter is described as an "important feature" of the *Sigl* disclosure. Col. 5, ll. 35-41.

Along similar lines, the *Dutta* reference teaches that it is the user that customizes the keyboard. *E.g.*, col. 3, ll. 57-61; col. 4, ll. 3-26. Furthermore, the *Dutta* reference teaches that it is the user that decides whether to use a default keyboard or a customized keyboard. *E.g.*, col. 5, ll. 1-19. The selection for a customized keyboard may allow the user to create a new keyboard, or to use a previously-created custom keyboard. *Id.* Nothing in the *Dutta* reference, however, teaches that the device (i.e., "PDA") itself makes determinations for the user regarding what keyboard to use, nor that the device actually customizes the keyboard in advance of user input. In particular, the *Dutta* teaches that the PDA only makes any dynamic predictions or determinations regarding keyboard usage *after* the user has already selected to use a customized keyboard. *E.g.*, col. 5, ll. 5-67. For example, the *Dutta* reference teaches that if the user selects a customized keyboard, the PDA may *then* use prediction technology to help a user automatically finish typing in a word or text string. *Id.* Along these lines, the *Dutta* reference teaches that the device may emphasize certain letters on a keyboard that are likely to finish the word or text already being entered by the user. *Id.*

Accordingly, neither the *Sigl* nor *Dutta* references teach or suggest, whether singly or in combination (and further teach away from) making dynamic determinations about a keyboard *before* the user makes any selections or input in an application. In particular, neither the *Sigl* nor *Dutta* reference teach or suggest, whether singly or in combination, that a "software input method manager configured to, *prior to receiving any user selection* in any of the plurality of application programs, *predict and select* an appropriate first input method from the plurality of input methods based on a *state* of a first application program and to *predict and select* an appropriate second input method from the plurality of input methods based on a *state* of a second application program," as taught in amended claim 1.

Similarly, neither the *Sigl* nor *Dutta* references teach or suggest, whether singly or in combination (and further teach away from) "*automatically determining, prior to any user selection in the first or second application program*, an input panel from a database of input methods for the first application program and for the second application program from a plurality of software input methods," as recited in amended claim 11. Furthermore, neither the *Sigl* nor *Dutta* reference teach or suggest "prior to any user selection after opening any of a plurality of application programs, selecting one or more input panels from a database of input panels based on the application program state data of the first and second application programs, and prior to any user selections with regard to the first or second application programs, the input panel independent of each of the plurality of application programs," as taught in amended claim 14.

Support for the claim amendments with respect to predicting and selecting a keyboard prior to user input can be found throughout Applicant's specification, and in exemplary part at ¶¶ 9, 39, 57, 64, and 69, as well as Figure 9. For example, ¶ 9 teaches that an input panel can be changed based on "what the user is *likely to need* for a given application's state." (Emphasis

added). Similarly, ¶ 39 teaches that, once an application has focus (i.e., a user has opened the application), "the state of the application can *automatically* be used to select an input method." (Emphasis added). In addition, ¶ 57 teaches that "information about an application's state can be externally determined, e.g., by an application state determination mechanism 302, and used to provide an appropriate software input panel." Furthermore, ¶ 64 teaches use of a "best guess" mechanism, and ¶ 66 describes automatic selection of an appropriate input panel if one "corresponding to an application program's state exists, is not already active, and is available." *See also* Figure 9, box 908.

Accordingly, Applicant respectfully submits that independent claims 1, 11, and 14, and the corresponding dependent claims, as well as new claim 25, which contains similar limitations, are allowable for at least these reasons.

Applicant respectfully submits, therefore, that the present application is in condition for allowance. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 4th day of October, 2006.

Respectfully submitted,

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